

# The Draft 303(d) Assessment Policy and Process for 2002

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# What is the 303(d) list?

- Required by Section 303(d) of the Clean Water Act
- A list of impaired (polluted) waterbodies
  - Waters that do not meet state water quality standards, including numeric and narrative standards
- Based on “all readily available data”

# What is the point of the 303(d) list?

- To identify truly polluted waters that need greater attention
  - “When permits are not enough”
  - Addresses both point and nonpoint sources
- Listed waterbodies require a total maximum daily load (TMDL), and accompanying load allocation



# What has happened so far?

- 4 Billion Years Ago: The Earth formed from a giant cloud of space dust
- 1972: Clean Water Act
- Early 1990s: States began submitting 303(d) lists, with little guidance, with few TMDLs being conducted
- Late 1990s: Greater scrutiny, litigation, more TMDLs
- 1998: Ecology submitted most recent Washington list
- 2001: EPA wrote new 303(d) guidance
- 2002: Ecology is updating its 303(d) assessment policy based on the EPA guidance and public concerns

# The 305(b) report

- Broader assessment of the state's water quality, also required by Clean Water Act
- EPA recommends an integrated 303(d)/305(b) report
  - Ecology will not prepare an integrated report this year, for timing reasons
  - However, Ecology will use much of the EPA integrated report guidance for the 303(d) list

# What is different in the new draft policy?

- New categories
- New data quality assurance requirements
- More detailed discussion of how to assess the data against the water quality standards
- New assessment criteria for temperature and conventional pollutants



# Categories

- Four categories, one with three subcategories
- Only one is the 303(d) list
  - All will be submitted to EPA and the public
  - However, only the 303(d) list requires EPA approval

# Categories

|  |              |                  |
|--|--------------|------------------|
| <b>Category 1</b><br>Meets Tested Standards  | Not impaired | No TMDL required |
| <b>Category 2</b><br>Waters of Concern   |              |                  |
| <b>Category 3</b><br>a: Has a TMDL<br>b: Has a Pollution Control Plan<br>c: Impaired by a Nonpollutant | Impaired     | TMDL required    |
| <b>Category 4</b><br>The 303(d) List   |              |                  |



# Category 1: Meets Tested Standards

- The water is “clean”
  - There is some data available
  - This data shows no water quality concerns
- Not the 303(d) list

# Category 2: Waters of Concern

- The water is not listed as impaired, but we're not so sure it's clean
  - Some samples exceed the water quality standards, but not enough to list
  - Data suggests impairment, but...
    - There is contradictory data
    - There are data quality assurance problems
- Not the 303(d) list

# Category 3a: Has a TMDL

- A TMDL has been written and has been approved by EPA
- Not the 303(d) list
  - ...As long as the TMDL is being successfully implemented



# Category 3b: Has a Pollution Control Plan

- More than just pollution laws
- Must be a site-specific and problem-specific plan
  - CERCLA, MTCA, RCRA cleanup plans
  - HCPs with specific water quality plans
- Not the 303(d) list
  - ...As long as the plan is being successfully implemented

# Category 3c: Impaired by a Nonpollutant

- Examples:
  - Loss of spawning beds
  - Loss of access due to culverts
  - Low flow
- Not the 303(d) list
  - A TMDL is not appropriate because the cause of impairment cannot be allocated among sources

# Category 4: The 303(d) List

- Data shows that at least one water quality standard is not attained due to a pollutant
- Yes, the 303(d) list
- A TMDL is required



# Waterbody segments

- Same segment system as used in 1998
  - Township/range/section for rivers and lakes
  - Latitude/longitude grids for open waters
- Extended segments
  - May pool data in multiple contiguous segments for assessment together
  - Each segment to be pooled must have at least one exceedance

# Types of data used

- All readily available data
- From many sources:
  - Government, including tribes
  - Academic
  - Permittee
  - Volunteer
- Numeric and narrative data

# Data quality assurance

- All parties who collect and submit data must follow a quality assurance plan
- They must provide documentation that the plan was followed, including for previously submitted data



# Data requirements

- Data must be representative of waterbody
  - May be seasonal when appropriate
- Must use proper sampling techniques

# Sediments

- Most recent samples, minimum of three
- Place on the 303(d) list if:
  - For chemical effects (marine waters only), the average of the three samples with the highest concentration exceeds the sediment quality standards, or
  - For biological effects, the three samples with the highest effects all exceed the standards

# Toxics

- (Toxics in the water, not the sediment)
- Samples from most recent three-year period with at least three samples, or fish tissue samples
- Place on the 303(d) list if:
  - At least two water samples exceed the standard, or
  - At least one fish sample exceeds the standard



# Fecal coliform

- Minimum of five samples, collected by year or, preferably, by season
- Place on the 303(d) list if:
  - Fecal coliform levels exceed the water quality standard during any season, or
  - Health department issues shellfish bed closures

# Other pollutants

- For example: temperature, pH, dissolved oxygen, nutrients, turbidity
- Place on the 303(d) list if:
  - At least 10% of the water exceeds the water quality standard, as evidenced by the water samples, using a binomial distribution method with a minimum of three exceedances

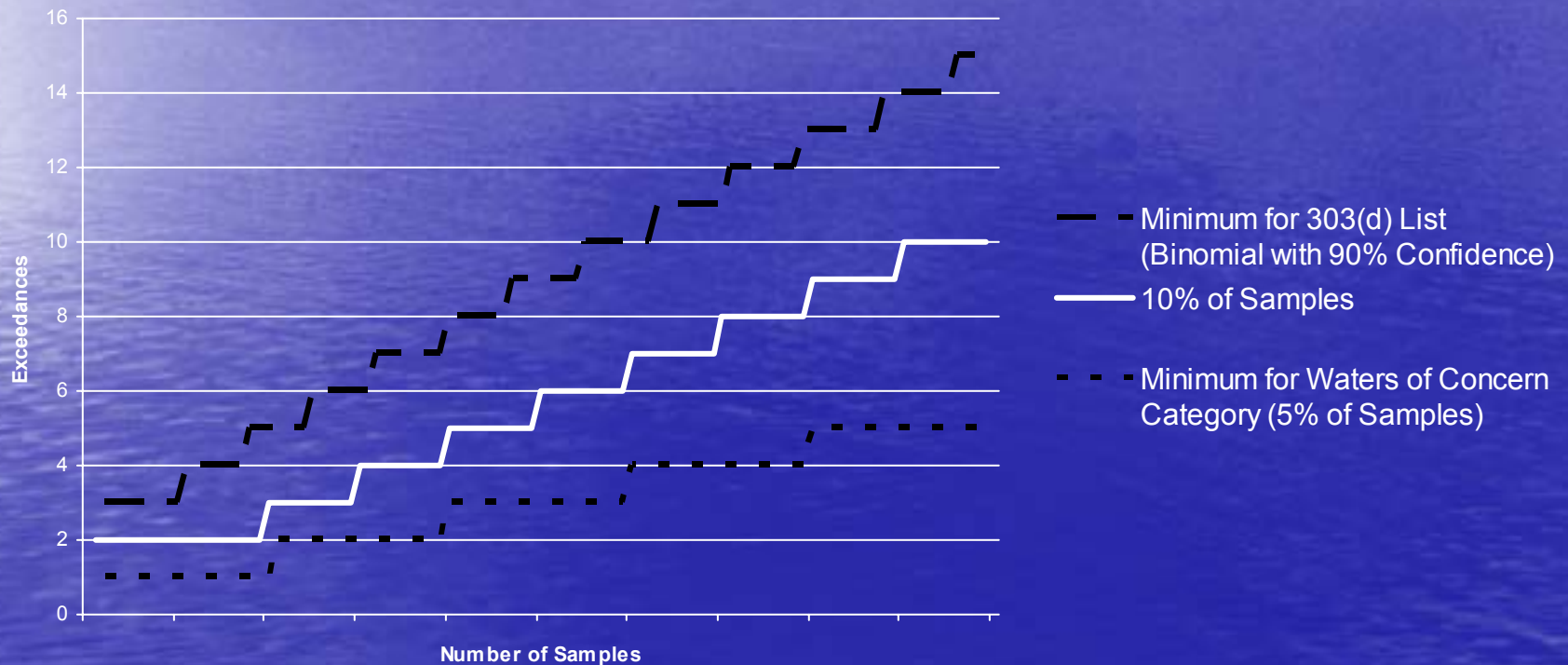
(In 1998, the criterion was a straight 10% of samples were exceedances, minimum of two)

# Binomial distribution method

- Statistical method
- The sample data represents a “poll” of the water as a whole
- Does the data show that the water as a whole has over 10% exceedances?
- 90% confidence interval



# Number of exceedances required to list



# Use of previously submitted data

- Older data will not be used to place waterbodies on the 303(d) list if:
  - The data is more than 10 years old, and newer data is available, or
  - The data does not meet current requirements, including quality assurance requirements, or
  - The water quality standards have changed and the data shows they are met, or
  - Flaws are identified in the original data

# Natural conditions

- Will not be placed on the 303(d) list if the impairment is by natural causes
  - Could be placed in *Meets Tested Standards* category with a note about natural conditions
- For certain parameters, the water quality standards allow human activity to have a limited impact beyond natural conditions
  - Place on the 303(d) list if the human impact exceeds this allowance



# Prioritizing TMDLs

- 303(d) listed waters will be prioritized for when to do TMDLs on them
- In addition, Ecology has a 1998 legal settlement on prioritizing TMDLS
  - Each year, listed waterbodies are prioritized
  - One-fifth of the state is begun each year, on a five-year watershed cycle
  - This process will more directly affect when given TMDLs are conducted

# How to submit data

- “Call for data” tentatively scheduled for May through June
- Data format
  - Prefer electronic, ideally a format that fits Ecology’s database, otherwise in spreadsheet
  - Will take paper hard copies
- Requires quality assurance
- Check website for details

# Public participation

- Opportunities for public input include:
  - Comment on the draft policy
  - Submit data
  - Comment on Ecology's proposed list
  - Comment on EPA's approval (or disapproval) of the proposed list
  - Participate in future TMDLs



# So, what happens next?

- Now: Comment on the draft policy
- April: Publish the final policy
- May to June: Call for data
- June to Dec.: Assessment by Ecology
- December: Proposed 303(d) list
- January 2003: Public review of list
- March 2003: Submit list to EPA

# Conclusion

- Then we start all over for the next assessment cycle
- How to contact us:

|               |                |               |  |
|---------------|----------------|---------------|--|
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